

REMARKS

Claims 1 and 5-11 are pending in this application.

Applicant has amended claims 1, 5-7, and 9-11, and has herein canceled claims 2-4 (claim 12 was previously canceled). The changes to claims 1, 5-7, and 9-11 made herein do not introduce any new matter.

Rejections Under 35 U.S.C. § 103

Applicant respectfully requests reconsideration of: 1) the rejection of claims 1, 2, and 9-11 under 35 U.S.C. § 103(a) as being unpatentable over *Nakajima et al.* (“*Nakajima*”) (US 2002/0135687 A1) in view of *Shiobara* (JP 2000-115788); 2) the rejection of claims 3-7 under 35 U.S.C. § 103(a) as being unpatentable over *Nakajima* in view of *Shiobara*, and further in view of *Kuwata et al.* (“*Kuwata*”) (JP 2001-177733); and 3) the rejection of claim 8 under 35 U.S.C. § 103(a) as being unpatentable over *Nakajima* in view of *Shiobara*, and further in view of *Sato* (JP 2001-339739) (as noted above, claims 2-4 have been canceled herein). As will be explained in more detail below, the prior art applied by the Examiner would not have rendered the subject matter defined in independent claims 1, 5, and 9-11, as presented herein, obvious to one having ordinary skill in the art.

Claim 1

Applicant has amended independent claim 1 to include the features specified in original claims 2 and 3, as well as to include a modified version of the features specified in original claim 4. In addition, Applicant has deleted the language “generated by an image generating device” from the claim. Support for the modified version of the features specified in original claim 4 can be found in Figures 15(a)-(b) and the description of these drawings in the specification. Support for the deletion of the above-indicated language can be found in Figure 9 and the description of this drawing in the specification. In light of the changes to claim 1, claims 2-4 have been canceled.

In support of the rejection of claims 3-7, which might be considered applicable to amended claim 1 in light of the above-discussed changes to this claim, the Examiner asserts that the *Kuwata* reference teaches “selecting pixels for the analysis from among all pixels making up the image data, a condition whereby pixels having a higher saturation value are selected for the analysis as a pixel hue comes closer to the hue of the light source, in order to adjust the magnitude of white balance adjustment process.” Office Action at page 7.

However, *Kuwata* states that $thS = 32$, where thS is the threshold of saturation (Sat) (see Paragraph 0029 of the English Machine Translation). This means that the threshold, thS , is constant regardless of the hue of the pixel. As such, the *Kuwata* reference does not teach or suggest the feature of amended claim 1 that specifies that “the condition including that saturation of a pixel is equal to or less than a saturation threshold value, the saturation threshold value being large in a case where hue of the pixel is within a partial range of hue compared to a case where the hue of the pixel is outside the partial range of hue, the partial range of hue including the hue of the light source.”

Furthermore, none of the other references, namely, *Nakajima*, *Shiobara*, and *Sato*, disclose or suggest the above-listed features of amended claim 1. Thus, for at least this reason, the references applied by the Examiner, whether considered alone or in combination, do not disclose or suggest each and every feature of the subject matter defined in amended claim 1. Consequently, the references applied by the Examiner would not have rendered the subject matter defined in amended claim 1 obvious to one having ordinary skill in the art.

Claims 9-11

Applicant has amended each of independent claims 9-11 along the same lines that claim 1 has been amended herein. Accordingly, the arguments set forth above with regard to amended claim 1 also apply to amended claims 9-11.

Claim 5

Applicant has rewritten claim 5 in independent format, and has amended this claim to specify that the adjustment is caused in such a way that “the process parameter is large in a case where a shifted hue in the image data is within a partial range of hue compared to a case where the shifted hue in the image data is outside the partial range of hue, in order to adjust the magnitude of the white balance adjustment process, the partial range of hue including the hue of the light source.” Support for the changes to claim 5 can be found in Figures 16(a)-(b) and the descriptions of these drawings in the specification.

The prior art applied by the Examiner does not teach or suggest the above-listed features of amended claim 5. The process parameter represents a proportion of an amount of white balance adjustment process to an amount of color cast (see Figures 13(b) and 16(b) and the corresponding descriptions of these drawings in the specification). The processing amount proportion, k , in Figure 16(b) corresponds to the process parameter specified in the claims. Furthermore, the hue of the light source is obtained using the light source information instead of the image data. Accordingly, the process parameter (the processing amount proportion, k) changes as the hue of the light source changes, even when the image data is the same. As a result, the amount of white balance adjustment process changes as the hue of the light source changes, even when the image data is the same (see Figure 13(b)).

In support of the rejection of claim 5, the Examiner states that the combined teachings of *Nakajima*, *Shiobara*, and *Kuwata* as applied against claim 3 teach the features of claim 5. However, the *Kuwata* reference discloses as follows:

- 1) the average of each of R, G, B, and Y is calculated respectively (see Paragraph 0025);
- 2) the difference from the average of Y is calculated for each of the averages of R, G, and B, respectively (see Paragraphs 0026 and 0032); and

3) the amendment LUT is created according to the difference for R, G, and B, respectively (see Paragraphs 0026 and 0031, and Figure 7).

The foregoing items mean that the amendment LUT is determined according to only the difference (the image data). As a result, the amendment LUT is the same when the image data is the same regardless of the hue of the light source. Therefore, the amendment LUT in the *Kuwata* reference is significantly different from the process parameter in the claimed subject matter because the amendment LUT does not depend on the light source information, even if it appears that the amendment LUT would be similar to the process parameter to at least some degree.

In view of the foregoing, the *Kuwata* reference does not disclose or suggest at least the feature of amended claim 5 that specifies that the adjustment is caused in such a way that “the process parameter is large in a case where a shifted hue in the image data is within a partial range of hue compared to a case where the shifted hue in the image data is outside the partial range of hue, in order to adjust the magnitude of the white balance adjustment process, the partial range of hue including the hue of the light source.”

Furthermore, none of the other references, namely, *Nakajima*, *Shiobara*, and *Sato*, disclose or suggest the above-listed features of amended claim 5. Thus, for at least this reason, the references applied by the Examiner, whether considered alone or in combination, do not disclose or suggest each and every feature of the subject matter defined in amended claim 5. Consequently, the references applied by the Examiner would not have rendered the subject matter defined in amended claim 5 obvious to one having ordinary skill in the art.

Patentable Subject Matter

Accordingly, for at least the foregoing reasons, independent claims 1, 5, and 9-11, as amended herein, are patentable under 35 U.S.C. § 103(a) over the *Nakajima*, *Shiobara*, *Kuwata*, and *Sato* references, whether considered alone or in combination. Claims 6 and 7,

each of which depends from claim 5, and claim 8, which depends from claim 1, are likewise patentable under 35 U.S.C. § 103(a) over the *Nakajima*, *Shiobara*, *Kuwata*, and *Sato* references, whether considered alone or in combination, for at least the same reasons set forth above regarding the applicable independent claim.

Conclusion

In view of the foregoing, Applicant respectfully requests reconsideration and reexamination of claims 1 and 5-11, as presented herein, and submits that these claims are in condition for allowance. Accordingly, a notice of allowance is respectfully requested. In the event a telephone conversation would expedite the prosecution of this application, the Examiner may reach the undersigned at (408) 749-6902. If any additional fees are due in connection with the filing of this paper, then the Commissioner is authorized to charge such fees to Deposit Account No. 50-0805 (Order No. MIPFP134).

Respectfully submitted,
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